A&D Weighing Solutions

Balances / Scales / Peripheral Devices













Discover Precision

http://www.aandd.jp

"Simple, Practical and of High Value..."

Congratulations: You've just picked up the right brochure.

A&D Company, Limited, Japan's top manufacturer of electronic weighing instruments, is particularly proud of the unmatched width of our product portfolio, with innovations always aimed at providing users with high practical utility and high value for the price.

The fact is that no matter what industry you are in, whatever use you have in mind, or whatever solution you are looking for, you will likely find a product that precisely fits your requirements, within your budget!

Key Feature Index



Calibration with Internal Weight

Enables you to ensure balance accuracy with just one key press



Calibration with External Weight

Requires an external weight for calibration



Super Hybrid Sensor/Compact Super Hybrid Sensor

Simultaneously achieves precision, speed and stability, as well as ease of maintenance



Reverse-backlit Liquid Crystal Display

Provides a bright, high contrast that is extremely easy to read and less stressful on the eyes



Vacuum Fluorescent Display

Provides clear and wide-angle visibility even in a dimly-lit area



LED Display

Provides a wide viewing angle and colorful display, allowing quick, intuitive judgments



Liquid Crystal Display with Backlight

Ensures visibility in a dimly-lit area



Liquid Crystal Display

Provides a sharp-cut, energy-saving display



Quick USB Interface

Transfers weighing data to a PC USB port (one way) requiring no special software installation



LAN-Ethernet Interface (with WinCT-Plus software)

Enables acquiring data from and sending commands to multiple weighing instruments



RS-232C Serial Interface

Outputs data to and receives commands from a PC, printer, data logger, etc.



GLP/GMP/GCP/ISO Compliant Output

Outputs the manufacturer, model, serial number, ID number, space for signature, calibration records, etc., for documentation requirements



Clock and Calendar Function

Adds time and date information to output data



Data Memory Function

Stores weighing data, calibration results, unit masses, upper/lower limits, preset tares, etc., for easy recall or output



Counting Function with Automatic Counting Accuracy Improvement

Displays the number of pieces based on their individual unit weight while automatically optimizing the accuracy of the unit weight



Counting Function

Displays the number of pieces based on their individual unit weight



Percentage Function

Displays the weight value as a percentage of a stored reference mass



Animal Weighing (Hold) Function

Helps measure and record the weight of a moving object such as an animal by averaging fluctuation



Statistical Calculation Function

Displays and outputs statistical calculation data including number of data, sum, max, min, range (max – min), mean, standard deviation and coefficient of variation



Comparator Function

Compares weight values within set limits and makes pass/fail judgments



Auto Power OFF Function

Turns off the display automatically after a period of inactivity to save power



Rechargeable Battery Operation

Works with a built-in rechargeable battery unit



Smart Range Function

Automatically switches between the precision and standard ranges, and recovers the full precision range with a press of the RE-ZERO (tare) key



EC Type Approval

Includes models that are legal for trade in the member countries of the European Union



IP68 Dust and Waterproof

Permits no infiltration of water while immersed to a depth of 1 meter for 24 hours



NSF Compliant

Meets food protection and sanitation requirements as established by NSF International



Accumulation (M+) Function

Sums the weighing results and displays the total value



Auto Power ON Function

Activates the weighing mode display automatically when plugged in



Underhook

Enables magnetic, hot, or contaminated materials to be hanged for weighing or for density measurements



Normal Battery Operation

Works with off-the-shelf battery cells



Universal Flexi Coms Function

Enables editing of serial data output format or printout format



IP69K Dust and Waterproof

Withstands heavy-duty washdown with high-pressure (8,000 to 10,000 kPa) and high-temperature (80 \pm 5 °C) water from up close (100 to 150 mm)



IP65 Dust and Waterproof

Permits no infiltration of dust and withstands water jetting from any direction



Software

Data management software available

Abbreviations and Conversion Factors of Weighing Units

Abbreviation	Unit	Conversion factor (to gram)	
9	Gram	1 g	
mg	Milligram		
kg	Kilogram		
OZ	Ounce (avoir)	28.349523125 g	
lb	Pound	453.59237 g	
lb-oz	Pound-Ounce	ce 1 lb = 16 oz 1 oz = 28.349523125 g	
ozt	Troy ounce	31.1034768 g	
ct	Metric carat	0.2 g	
mom	Momme	3.75 g	
dwt	Pennyweight	1.55517384 g	
gr	Grain (UK)	0.06479891 g	
	Tael (HK general, Singapore)	37.7994 g	
tl	Tael (HK jewelry)	37.429 g	
u	Tael (Taiwan)	37.5 g	
	Tael (China)	31.25 g	
tol	Tola (India)	11.6638038 g	
SG	Specific gravity	N/A	
N	Newton	See below*	

^{*} Newton = (weight in gram) × $(9.80665 \text{ m/s}^2) / 1000$

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(Capacity: 6 kg to 30 kg / Resolution: 0.0005 g to 0.002 g)			
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(Capacity: 10 kg to 220 kg / Resolution: 0.001 g to 0.02 g)		(Capacity: 510 g / Resolution: 0.1 g)	

BI Series

































- Instant and smooth static elimination using a built-in fanless ionizer to ensure stable weighing
- Large working space for better operability and a wider range of applications
- Interlockable sliding doors allowing efficient operation with both hands
- ✓ Anti-static glass breeze break with a thin evaporated metal coating
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Embedded temperature, humidity and atmospheric pressure sensors
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG (either tl or tol can be added upon request)
- ✓ Density determination function and an optional density determination kit (for BM-252/200/300/500 only)
- ✓ Comes equipped with the handy AD-1688 weighing data logger
- ✓ Expert assessment of the set-up environment using AND-MEET*

 (please inquire at your local distributor for details) *Patent pending

Special pans/holder for the BM-20/22 (standard accessories)

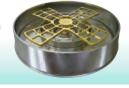






Aluminum analytical pans $\emptyset 8 \text{ mm } (0.05 \text{ ml}) / \emptyset 12 \text{ mm } (0.3 \text{ ml}) / \emptyset 15 \text{ mm } (0.8 \text{ ml})$

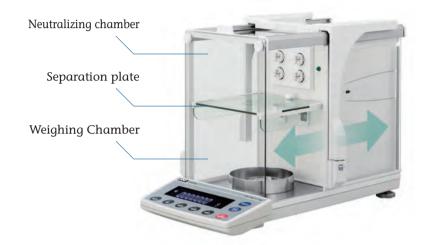




Weighing pans for PM filters ø50 mm / ø95 mm



Microfuge tube holder



Interlockable sliding door

Possible to slide a door open using the handle on the opposite side



Pipette accuracy testing using an optional kit (BM-014)



Model	BM-20	BM-22	BM-252	BM-200	BM-300	BM-500
Capacity	22 g	5.1 g / 22 g	250 g	220 g	320 g	520 g
Resolution	0.001 mg	0.001 mg / 0.01 mg	0.01 mg	0.1 mg		
Repeatability (0)	0.0025 mg (for 1 g)	0.004 mg (for 1 g) / 0.01 mg	0.03 mg (for 100 g)	0.1 mg 0.2 mg		mg
Linearity	±0.010 mg	±0.010 mg / ±0.02 mg	±0.10 mg	±0.2 mg	±0.3 mg	±0.5 mg
Weighing pan	ø2	5 mm	ø90 mm			

Options & Accessories

AD-1653 Density determination kit (for BM-252/200/300/500 only)
AD-1671 Anti-vibration table for balances *Strongly recommended!*

AD-1672 Tabletop breeze break *Strongly recommended!*BM-08 Ethernet interface with WinCT-Plus software

BM-014 Pipette accuracy testing kit

BM-025 Foot switch

AX-BM-031 Display covers (5 pcs)

AX-BM-032 Microfuge tube holder (for BM-20/22 only)

AX-BM-NEEDLESET Electrode units for the ionizer

AX-ROUND-PAN-L Round aluminum analytical pans (ø15 mm, 0.8 ml, 100 pcs)
AX-ROUND-PAN-M Round aluminum analytical pans (ø12 mm, 0.3 ml, 100 pcs)
AX-ROUND-PAN-S Round aluminum analytical pans (ø8 mm, 0.05 ml, 100 pcs)

GH Series

































- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Anti-static glass breeze break with a thin evaporated metal coating
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG (either tl or tol can be added upon request)
- ✓ Density determination function and an optional density determination kit

Model	GH-252	GH-202	GH-120	GH-200	GH-300
Capacity	101 g / 250 g	51 g / 220 g	120 g	220 g	320 g
Resolution	0.01 m	ng / 0.1 mg	0.1 mg		
Repeatability (σ)	0.03 mg / 0.1 mg	0.02 mg / 0.1 mg	0.1 mg		0.2 mg
Linearity	±0.1 mg / ±0.2 mg	±0.03 mg / ±0.2 mg	±0.2 mg ±0.3 mg		
Weighing pan	ø90 mm				

Options & Accessories

AD-1653 Density determination kit
GH-02 Quick USB interface with cable

GH-08 Ethernet interface with WinCT-Plus software

 \bigstar GH-02 and GH-08 cannot be used at the same time.

HR-i Series



- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Anti-static glass breeze break with a thin evaporated metal coating
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr (either tl or tol can be added upon request)

Model	HR-202i	HR-300i	
Capacity	51g / 220g	320 g	
Resolution	0.01 mg / 0.1 mg	0.1 mg	
Repeatability (σ)	0.02 mg / 0.1 mg	0.2 mg	
Linearity	±0.03 mg / ±0.2 mg	±0.3 mg	
Weighing pan	ø90 mm		



















Semi-Micro Analytical Balances





Open left or right side from front

- ✓ Handy lever on the front to open either side of the weighing chamber for quick and efficient access
- ✓ Small footprint of 249 mm by 330 mm to save space
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- Automatic self calibration to maintain accuracy under temperature changes
- ✓ Anti-static glass breeze break with a thin evaporated metal coating
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG (either tl or tol can be added upon request)
- Density determination function and an optional density determination kit

Model	GR-202	GR-120	GR-200	GR-300	
Capacity	42 g / 210 g	120 g 210 g		310 g	
Resolution	0.01 mg / 0.1 mg	0.1 mg			
Repeatability (σ)	0.02 mg / 0.1 mg	0.1 mg 0.2 mg			
Linearity	±0.03 mg / ±0.2 mg ±0.2 mg ±0.3 mg			±0.3 mg	
Weighing pan	ø85 mm				























HR-AZ/HR-A Series





































- High-speed weighing with 2-second stabilization
- Removable, shatterproof breeze break with antistatic coating
- Compact foot print: 198 mm \times 294 mm (smaller than an A4 sheet of paper)
- ✓ Rotary sliding doors requiring no extra space at the rear
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG, and a userprogrammable unit for conversion applications (either tl, tol or N can be added upon request)
- ✓ Density determination function and an optional density determination kit
- ✓ Easily visible, front-mounted spirit level for adjusting the leveling feet

Quickly removable breeze break

Allows fast, simple cleaning of the balance and use in confined spaces like glove boxes. The non-glass

breeze break also makes the balance suitable for use in food/drug-related

production lines.



HR-251AZ/A







Optional









Rotary sliding doors

The balance requires no extra space at the rear in order to access the weighing chamber, as the doors simply rotate behind the balance.





Density	determination	kit	(AD-1654	.)
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Using this kit, it is easy to calculate the density of a solid or liquid substance in density mode.

Model	HR-100AZ HR-100A	HR-150AZ HR-150A	HR-250AZ HR-250A	HR-251AZ HR-251A	
Capacity	102 g	152 g	252 g	62 g / 252 g	
Resolution	0.1 mg			0.1 mg / 1 mg	
Repeatability (σ)	0.1	mg	0 to 200 g: 0.1 mg 200 to 252 g: 0.2 mg	0.1 mg / 0.5 mg	
Linearity	±0.2 mg		±0.3 mg	±0.3 mg /±1 mg	
Weighing pan	ø90 mm				

Options & Accessories

AD-1654Density determination kitFXi-10Small breeze breakFXi-02Quick USB interface with cableFXi-11Large breeze breakFXi-08Ethernet interface with WinCT-Plus softwareAX-FXi-31Display covers (5 pcs)

FXi-09 Built-in rechargeable battery ***** FXi-02, FXi-08 and FXi-09 cannot be used at the same time.

MS-70/MX-50 MF-50/ML-50



















- Low moisture content measurement at 10 ppm (0.001%) resolution (MS-70)
- Fast and uniform heating with halogen lamp and innovative Secondary Radiation Assist (SRA) technology
- Accuracy verification with Sodium Tartrate Dihydrate (standard with MS-70, MX-50, and MF-50)
- ✓ Calibration function for heating temperature (for MS-70 and MX-50 only)
- ✓ Five different measurement programs
- ✓ Selectable heating patterns
- ✓ Translucent window enabling progress check
- ✓ Memory function for measurement conditions
- Quick reference card provided

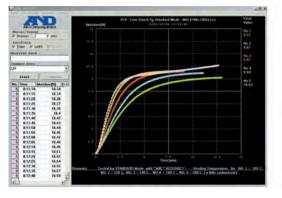


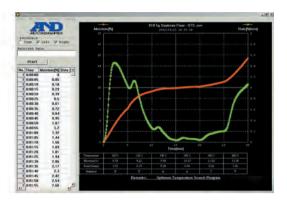
Secondary Radiation Assist (SRA)

The thermally conductive glass spreads the heat evenly over the sample, realizing more efficient and accurate measurement. It also protects the halogen lamp from soiling from the volatile components of samples.

Special Software "WinCT-Moisture"

(Standard with MS-70 and MX-50)





RsFig (Corn starch)

RsTemp (Soybean flour)

- Displays moisture rate changes over time in a graph (RsFig)
- Quickly and automatically suggests the most suitable heating conditions for first-time samples (RsTemp)
- ✓ Calculates measurement data statistics
- ✓ Saves the recorded data in CSV format
- ✓ Detects other changes to the sample material in addition to moisture rate
- ✓ Includes sample data summary

Model		MS-70 MX-50 MF-50 ML-50				
Measurement m	ethod	400 W straight halogen lamp heating system with SRA filter and SHS weighing technology				
Maximum samp	le weight capacity	71 g 51 g				
Min. display	Moisture content	0.001% / 0.01% / 0.1%	0.01% / 0.1%			
	Weight	0.0001 g	0.001 g	0.002 g	0.005 g	
Repeatability (σ)	Moisture content (over 1 g)	0.05%	0.1%	0.2%	0.5%	
	Moisture content (over 5 g)	0.01%	0.02%	0.05%	0.1%	
	Weight	0.0005 g	0.001 g	0.002 g	0.005 g	
Drying temperat	ture	30 to 200 °C 50 to 200 °C				
Measurement ur	nit	Wet base / Dry base / Dry content / Ratio / Weight			:	
Sample pan size			ø85	5 mm		

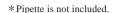
Options & Accessories

AX-MX-36 AX-MX-37 Tweezers (2 pairs)

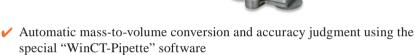
Spoon (2 pcs)

AX-MX-30	Disposable aluminum pan (100 pcs)	AX-MX-38	Display cover (2 pcs)
AX-MX-31	Sample pan (100 pcs)	AX-MX-39	Dust cover
AX-MX-32-1	Filtration glass fiber sheet (100 sheets)	AX-MX-40	RS-232C cable (25P-9P, 2 m)
AX-MX-32-2	Glass fiber sheet (100 sheets)	AX-MX-41	Calibration weight (20 g)
AX-MX-33	Sodium Tartrate Dihydrate (30 g \times 12 pcs)	AX-MX-42	WinCT-Moisture
AX-MX-34-120V	Halogen lamp (AC 100 to 120 V)	AX-MX-43	Temperature calibrator (for MS-70 and MX-50 only)
AX-MX-34-240V	Halogen lamp (AC 200 to 240 V)	AX-USB-25P	Serial/USB converter
AX-MX-35	Pan handle (2 pcs)		

AD-4212B-PT AD-4212A-PT FX-300i-PT







WinCT-Pipette

- ✓ Judgment by your preferred criteria manufacturer specifications, ISO8655, or your own
- ✓ Evaporation trap to minimize errors due to evaporation
- ✓ Portable carrying case for testing easily on-site*
- Printing function for GLP documentation requirements, etc.
 - * Not advisable with 0.001 mg resolution

Model	AD-4212B-PT	AD-4212A-PT	FX-300i-PT
Capacity	5.1 g / 31 g / 110 g*	110 g	320 g
Resolution	0.001 mg / 0.01 mg / 0.1 mg	0.1 mg	1 mg
Repeatability (σ)	0.015 mg / 0.05 mg / 0.1 mg	0.15 mg	1 mg
Linearity	±0.05 mg / ±0.05 mg / ±0.2 mg	±0.3 mg	±2 mg

^{*} Smart range

Leak Tester

AD-1690



* Pipette is not included.

- ✓ Takes only 5 seconds to determine if a pipette has a leak
- ✓ Leak detection by depressurization (-20kPa ±20%) ensuring no contamination (e.g. dust) enters the pipette being tested
- ✓ RS-232C interface to output data to a PC, etc.

Options & Accessories

AD-1690-01 Replacement tube set (adapter \times 1, attachment \times 4) AD-1690-02 Replacement filter set (filter unit \times 1, filter element \times 10) AD-1690-015 Carrying case

GX/GF Series





























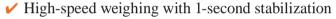












- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations (GX: manual or automatic / GF: manual only)
- ✓ Automatic self calibration to maintain accuracy under temperature changes (GX)
- ✓ Multiple weighing units: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, SG, and a userprogrammable unit for conversion applications (either tl, tol or N can be added upon request)
- ✓ Density determination function (an optional density determination kit is available for the models with 0.001 g resolution)
- ✓ Quick reference card provided

Model	GX-200 GF-200	GF-300	GX-400 GF-400	GX-600 GF-600	GX-800 GF-800	GX-1000 GF-1000				
Capacity	210 g	310 g	410 g	610 g	810 g	1100 g				
Resolution		0.001 g								
Weighing pan			128 × 1	28 mm						

Model	GF-1200	GX-2000 GF-2000	GF-3000			GX-6000 GF-6000	GX-8000 GF-8000		
Capacity	1210 g	2100 g	3100 g	4100 g	6100 g	6100 g	8100 g		
Resolution		0.01 g 0.1 g							
Weighing pan				165 × 165 mm					

Options & Accessories

GX-02 Quick USB interface with cable

GX-04 Comparator output with a buzzer/RS-232C/Current loop output

GX-06 Analog output/Current loop output

GX-10 Glass breeze break for the pan size of 128 mm imes 128 mm

★ Only one of GX-02, GX-04, GX-06 or the standard RS-232C interface can be used.

** GX-04 and GX-06 are factory-installed options.

GX-11 $\,$ Glass breeze break for the pan size of 165 mm \times 165 mm

GX-12 Animal weighing pan (not available for GX/GF-200)

GX-13 Density determination kit (for the pan size of 128 mm × 128 mm only)

FZ-i/FX-i Series



































Optional



- ✓ High-speed weighing with 1-second stabilization
- ✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)
- ✓ Protection mechanism against vertical and transverse overloading
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, and a userprogrammable unit for conversion applications (either tl, tol or N can be added upon request)

						FZ-2000i			
Model	FX-120i	FX-200i	FX-300i	FX-500i	FX-1200i	FX-2000i	FX-3000i	FX-5000i	
Capacity	122 g	220 g	320 g	520 g	1220 g	2200 g	3200 g	5200 g	
Resolution		0.001 g				0.01 g			
Weighing pan	ø130 mm					ø150	mm		

Options & Accessories

FXi-02	Quick USB interface with cable
FXi-08	Ethernet interface with WinCT-Plus software
FXi-09	Built-in rechargeable battery
FXi-10	Small breeze break
FXi-11	Large breeze break
FXi-12	Animal weighing pan (for FZ/X-1200i/2000i/3000i/5000i only)
FXi-15	Carrying case
AX-FXi-31	Main unit cover (5 pcs)

★ FX-02, FXi-08 and FXi-09 cannot be used at the same time.

FZ-iWP/FX-iWP Series





















- ✓ High-speed weighing with 1-second stabilization
- ✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)
- ✓ Protection mechanism against vertical and transverse overloading
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)































Optional





Model	FZ-120iWP FX-120iWP	FZ-200iWP FX-200iWP	FZ-300iWP FX-300iWP		FZ-2000iWP FX-2000iWP	
Capacity	122 g	220 g	320 g	1220 g	2200 g	3200 g
Resolution	0.001 g			0.01 g		
Weighing pan	ø130 mm				ø150 mm	

Options & Accessories

FXi-02 Quick USB interface with cable

FXi-08 Ethernet interface with WinCT-Plus software

Built-in rechargeable battery FXi-09 FXi-WP-10 Small breeze break FXi-WP-11 Large breeze break

FXi-12 Animal weighing pan (for FZ/X-1200iWP/2000iWP/3000iWP only)

FXi-15 Carrying case AX-FXi-31 Main unit cover (5 pcs) AX-KO2737-500 Waterproof RS-232C cable (5 m)

* FXi-02. FXi-08 and FXi-09 cannot be used at the same time. **★★** FZ-iWP/FX-iWP series are not IP65 compliant with FXi-02, FXi-08 or FXi-09.

EK-i/EW-i Series





















Optional







- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr (either tl, tol or N can be added upon request)
- Security ring to prevent theft

Model	EK-120i	EK-200i	EK-300i	EK-410i	EK-610i
Capacity	120 g	200 g	300 g	400 g	600 g
Resolution			0.01 g		
Weighing pan			ø110 mm		

Model	EK-600i	EK-1200i	EK-2000i	EK-3000i	EK-4100i	EK-6100i					
Capacity	600 g	1200 g	2000 g	3000 g	4000 g	6000 g					
Resolution		0.1 g									
Weighing pan		170 × 133 mm									

Model	EK-6000i	EK-12Ki	EW-150i				
Capacity	6000 g 12000 g		30 g 60 g 150 g		150 g		
Resolution	1 g		0.01 g 0.02 g 0.05 g				
Weighing pan	170 × 133 mm		ø110 mm				

Model	EW-1500i			EW-12Ki		
Capacity	300 g	600 g	1500 g	3000 g	6000 g	12000 g
Resolution	0.1 g	0.2 g	0.5 g	1 g	2 g	5 g
Weighing pan			170 × 1	.33 mm		

Options & Accessories

EKW-04i Comparator relay output

EKW-07i Underhook (for EK-4100i/6000i/6100i/12Ki, EW-12Ki only)

EKW-09i Rechargeable battery pack (Ni-MH)

EJ-12 Carrying case
AX-3005824-5S Protective cover (5 pcs)

 \bigstar EKW-04i and EKW-09i cannot be used at the same time.

GX-K/GF-K Series



































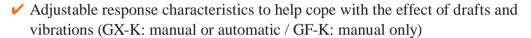


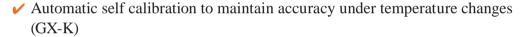












✓ Multiple weighing units: g, kg, oz, lb, lb-oz, ozt, ct, mom, dwt, gr*, SG, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request) * gr not available with the GX-32K/GF-32K.

✓ Density determination function

Quick reference card provided







Model	GX-8K GF-8K	GX-8K2 GF-8K2	GX-10K GF-10K	GX-12K GF-12K	GX-20K GF-20K	GX-30K GF-30K	GX-32K GF-32K			
Capacity	8.1 kg	2.1 kg / 8.1 kg	10.1 kg	12 kg	21 kg	31 kg	6.1 kg / 31 kg			
Resolution	0.01 g	0.01 g / 0.1 g	0.01 g	0.01 g 0.1 g 0.1 g / 1 g						
Weighing pan	270 × 210 mm									

Options & Accessories

GX-04K Comparator output with a buzzer/RS-232C/Current loop output

GX-06K Analog output/Current loop output GX-07K Waterproof RS-232C cable (25P-9P, 5 m)

GXK-012 Animal weighing pan GXK-015 Carrying case

AX-GXK-31 Breeze Break for GX-K/GF-K

* Only one of GX-04K, GX-06K or the standard RS-232C can be used.

** GX-K/GF-K series are not IP65 compliant with GX-04K or GX-06K.

IP65 Dust & Waterproof Precision Industrial Balances



- ✓ Adjustable swing arm display (models with detached display stand also available)
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- Automatic self calibration to maintain accuracy under temperature changes
- ✓ Multiple weighing units: g*, kg, oz, lb, lb-oz, ozt, ct*, mom*, dwt, SG, and a user-programmable unit for conversion applications (either tl, or tol can be added upon request)

GP-30K

GP-30KS

31 kg

GP-32K

GP-32KS

6.1 kg / 31kg

0.1 g / 1 g

384 × 344 mm

GP-40K

41 kg

0.5 g

✓ Density determination function

*g, ct, mom not available with the GP-102K.

GP-20K

21 kg

0.1 g



Swing arm display

GP-100K

GP-100KS

101 kg

GP-102K

61 kg / 101 kg

1 g / 10 g

386 × 346 mm

-£OFFD-
[40117]
Auto Power

Optional



Options & Accessories

GP-04 Comparator output with a buzzer/RS-232C Current loop output

GP-12K

12 kg

- GP-06 Analog output/Current loop output
- GP-07 5-meter extension cable (for GP-30KS/32KS/61KS/60KS/100KS)
- GP-12 Animal weighing pan

Model

Capacity

Resolution

Weighing pan

GP-20 Underhook (for GP-12K/20K/30K/30KS/32K/32KS/40K)

GP-60K

GP-60KS

61 kg

- GP-21 Underhook (for GP-60K/60KS/61K/61KS/100K/100KS/102K)
- GP-22 AD-8121B printer support

GP-61K

GP-61KS

61 kg

0.1 g

- \bigstar $\;$ Only one of GP-04, GP-06 or the standard RS-232C can be used.
- ** GP-07 is a factory-installed option.

MC Series





































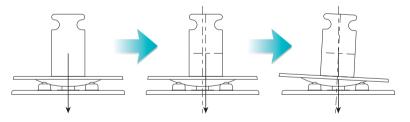




- ✓ Stabilizing filter to minimize errors due to drafts or vibrations
- ✓ Extra decimal place that also makes it possible to monitor fine weight changes with heavy tare weights
- ✓ Multiple weighing units: g, kg*, oz, ozt, ct, mom, dwt, gr, SG, and a userprogrammable unit for conversion applications (either tl or * kg for MC-100KS only tol can be added upon request)
- ✓ Quick reference card provided

Auto-centering pan (available for MC-1000/6100/10K/30K)

The auto-centering pan realizes mass comparison with higher accuracy by correcting eccentric loadings.



Model	MC-1000	MC-6100	MC-10K	MC-30K	MC-100KS
Capacity	1100 g	6100 g	10.1 kg	31 kg	101 kg
Resolution	0.0001 g	0.0	01 g	0.01 g	0.1 g
Repeatability (o)*	0.0005 g (for 1 kg) 0.0004 g (for 500 g)	0.004 g (for 5 kg) 0.0015 g (for 2 kg)	0.005 g (for 10 kg) 0.004 g (for 5 kg)	0.015 g (for 20 kg)	0.2 g (for 100 kg) 0.1 g (for 60 kg)
Linearity	±0.003 g	±0.0	03 g	±0.2 g	±2 g
Weighing pan	128 × 128 mm	165 × 165 mm	270 × 210 mm		386 × 346 mm

^{*} Repeatability when the auto-centering pan or an automatic loading machine is used under good ambient conditions.

Options & Accessories

AX-MC1000PAN Auto-centering pan (for MC-1000) Auto-centering pan (for MC-6100) AX-MC6100PAN AX-MC10K/30KPAN Auto-centering pan (for MC-10K/30K)

★ Please refer to the GX, GX-K and GP series for options for MC-1000/6100, MC10K/30K and MC-100KS respectively.



























AD-4212A

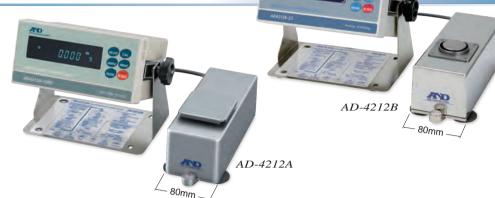












00nn

- Protection mechanism against vertical and transverse overloading due to actuator malfunctions, etc.
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units*: g, mg, oz, ozt, ct, mom, dwt, gr, (either tl or tol can be added upon request)
- ✓ Automatic zero display after data output
- ✓ Wall/panel-mountable display unit
- Possible to create your own weighing pan
- ✓ Comparator contact output with buzzer (AD-4212A: 3 level / AD-4212B: 3 or 5 level)
- ✓ Chemically resistant stainless steel** sensor unit (AD-4212B)
- ✓ Comes with a free calibration weight (OIML Class E2 equivalent)
 - * A user programmable unit is also available with the AD-4212A series ** SUS304 for the body and SUS316 for the weighing pan

Model	AD-4212A-100	AD-4212A-200	AD-4212A-600	AD-4212A-1000		
Capacity	110 g	210 g	610 g	1100 g		
Resolution	0.1 mg	1 mg				
Stabilization time (approx.)*	0-30 g: 1.1 sec 30-110 g: 1.3 sec	0-30 g: 0.8 sec 30-210 g: 1.0 sec	0-30 g: 0.9 sec 30-610 g: 1.1 sec	0-30 g: 0.9 sec 30-1100 g: 1.1 sec		
Weighing pan	50 × 50 mm		70 × 70 mm			

Model	AD-4212B-23	AD-4212B-101	AD-4212B-102	AD-4212B-201	AD-4212B-301
Capacity	21 g	31 g / 110 g	110 g	210 g	310 g
Resolution	0.001 mg	0.01 mg / 0.1 mg	0.01 mg	0.1 mg	
Stabilization time (approx.)*	12 sec	4.0 sec / 2.5 sec	4.0 sec	2.5 sec	
Weighing pan	ø34 mm			50 × 5	0 mm

 $[\]star$ When set to FAST in a good weighing environment

Optional



Options & Accessories

AD-4212A-01 BCD output / external contact input
AD-4212A-04 5-level comparator contact output (for AD-4212A)

AD-4212A-07 Extension cable (3 m)

AD-4212A-08 Ethernet interface with WinCT-Plus software

AD-4212A-19 Stainless steel breeze break (comes as standard with AD-4212A-100 and all AD-4212B models)

AD-4212A-20 Metal leveling foot

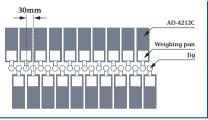
★ Only one of AD-4212A-01, AD-4212A-04, AD-4212A-08, or the standard interface can be used.

AD-4212C Series

* The EM-DLC is a high precision electromagnetic weighing sensor with an integrated analog-to-digital converter

Installation images















AD-4212C-301 /3100





- ✓ Direct digital data output to a panel computer, PLC, or PC via RS-232C
- ✓ High-speed data transmission of up to 50 times/second
- ✓ IP65 dust and waterproof construction
- ✓ Protection mechanism against vertical and transverse overloading due to actuator malfunctions, etc.
- ✓ Removable leveling feet for direct attachment on the mounting base
- ✓ Free WinCT-AD4212C software for easy calibration and response setting
- ✓ Comes with a free calibration weight (OIML Class E2 equivalent)
- ✓ CC-Link connection to a PLC through the optional AD-8923-CC remote controller (AD-8923-BCD for BCD output is also available)

AD-8923-CC (sold separately)

Possible to receive power directly from the connected AD-4212C (and vice versa)



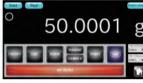
Model	AD-4212C-301	AD-4212C-300	AD-4212C-600	AD-4212C-3100	AD-4212C-3000	AD-4212C-6000
Capacity	51 g / 320 g	320 g	620 g	510 g / 3200 g	3200 g	6200 g
Resolution	0.0001 g / 0.001 g	0.001 g		0.001 g / 0.01 g	0.01 g	
Stabilization time (approx.)*	d = 0.0001 g: 1.3 sec d = 0.001 g: 1.0 sec	0 - 30 g: 0.5 sec 0 - 30 g: 0.5 sec 30 - 320 g: 1.0 sec 30 - 620 g: 1.0 sec		d = 0.001 g: 1.3 sec d = 0.01 g: 1.0 sec	0 - 300 g: 0.5 sec 300 - 3200 g: 1.0 sec	0 - 300 g: 0.5 sec 300 - 6200 g: 1.0 sec
Weighing pan	50 × 50 mm					

 $[\]bigstar$ When set to FAST in a good weighing environment

AD-1691







Eccentricity error test

Remote control

- Supports daily and periodic checks of balance quality and performance
- Calculates on the spot the expanded uncertainty of calibration based on seven uncertainty components
- ✓ Determines the minimum weight at the actual location of measurement in accordance with United States Pharmacopeia (USP) standards
- ✓ Equipped with the A&D Measurement Environment Evaluation Tool (AND-MEET)* to help improve balance repeatability
- ✓ Quickly outputs the results in report format
- Can be used as a separate touch-panel display for an A&D balance

* Patent pending

Weighing Environment Logger

AD-1687



- Simultaneously records environmental (temperature, humidity, barometric pressure, and vibration) and weighing data with time and date
- ✓ Large memory capacity of 10,000 data sets
- ✓ Instant data saving to a PC requiring no special software
- ✓ No battery required when connected to either a balance/scale or PC
- ✓ Trend graph mode to display chronological changes in graph format
- ✓ Interval time setting for environmental data recording
- ✓ Portable size of $127 \times 90 \times 36$ mm (including the protective cover)
- ✓ IP65 dust and waterproof (with the protective cover on)

Sensor	Resolution	Measurement range	Accuracy
Temperature	0.1 °C	0 to 60 °C	±0.5 °C (20 to 30 °C)
	0.1 °F	32 to 140 °F	±0.9 °F (68 to 86 °F)
Humidity	0.1% RH	0 to 100% RH	±3% (20 to 80%)
Barometric pressure	0.1 hPa	500 to 1100 hPa	±4 hPa (0 to 50 °C)
Vibration	1 Gal	0 to 2000 Gal	±20 %, static acceleration

AD-1688



- ✓ Stores up to 5,000 weighing results, including time and date added by its internal clock and calendar
- ✓ Dual interface RS-232C to an A&D balance/scale and USB to a PC
- ✓ Highly portable, pocket size of $55 \times 103 \times 16.5$ mm
- ✓ IP65 dust and waterproof (with the casing cover on)
- ✓ Receives power supply directly from the balance/scale or PC, requiring no battery



Quick USB Adapter

AD-8527



- ✓ Enables plug-and-play, real-time transmission of weighing data from an A&D balance/scale RS-232C interface to a PC USB port
- ✓ Internal clock and calendar to add time and date to the weighing results
- \checkmark Highly portable, pocket size of $55 \times 103 \times 16.5$ mm
- ✓ IP65 dust and waterproof (with the casing cover on)
- Receives power supply directly from the balance/scale or PC, requiring no battery

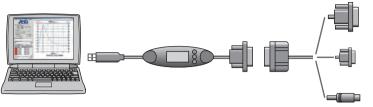
Compact Printer

AD-8127



- ✓ Easy setting and operation with a numeric keypad and LCD display
- ✓ Built-in calendar and clock for printing date and time at any time
- ✓ Sends re-zero and weighing data request commands to the balance/scale
- Clear and visible dot matrix printing, which also enables long-term preservation of the printed records
- ✓ Dust-free paper (AX-PP173-S) available for use in clean rooms

AX-USB-25P/9P/DIN



- * Please select either D-Sub 25 pin, D-Sub 9 pin, or DIN depending on your balance/scale.
- Converts the RS-232C output from a balance/scale and sends it to a PC USB port
- Enables you to send commands from a PC to a balance/scale, receive GLP outputs, etc. via USB

Serial/Ethernet Converter

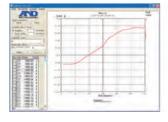
AD-8526



- ✓ Converts the RS-232C output from a balance/scale and sends it to Ethernet
- ✓ Realizes communication between a PC and multiple balances/scales when used with an Ethernet hub
- ✓ Comes with the WinCT-Plus software on CD-ROM (also downloadable from the A&D website)

Windows Communication Tools (Freeware)

WinCT







- Receives data in a text file format from a balance/scale, plots graphs, and/or allows exporting data directly to another application (e.g. Microsoft Excel) on a PC
- ✓ Sends commands to control a balance/scale

Windows Communication Tools (Freeware)

WinCT-Plus

 Sends commands for controlling and acquiring data from multiple balances/scales



AD-1671

- Isolates a highly sensitive analytical balance from minute vibrations that seriously affect the stability of weighing
- ✓ Fits nicely inside the AD-1672 tabletop breeze break for the BM series of micro analytical balances



Max. loading capacity	Approx. 40 kg
Material	Natural granite
Dimensions	460 (W) × 400 (D) × 71 (H) mm
Weight	Approx. 27 kg

Tabletop Breeze Break

AD-1672

- Shields a highly sensitive analytical balance from breezes and minute temperature changes caused by air conditioning, people passing by, or operators themselves
- Consists of antistatic plastic panels to minimize the effect of static electricity on the balance

Material	Transparent panel: Antistatic vinyl chloride	V
	Frame: Aluminum	
Dimensions	680 (W) × 600 (D) × 720 (H) mm	
Weight	Approx. 10 kg	

Remote Display

AD-8920A

- ✓ Displays weighing results to others away from the balance/scale (over the counter, etc.)
- Receives power supply directly from the balance/scale

Dimensions	128 (W) × 102 (D) × 76 (H) mm
Communication	Approx. 1 m (optional 5 or 10-meter
cable	extension cable available)





Remote Controller

AD-8922A

- ✓ Remotely controls a balance/scale with key operations
- ✓ Also outputs weighing data to another external device such as a PC or printer via RS-232C connection

Dimensions	238 (W) × 132 (D) × 170 (H) mm
Communication cable	Approx. 2 m





Options & Accessories

AD-8922A-01 BCD output
AD-8922A-04 Comparator output

AD-8922A-05 Current loop input AD-8922A-06 Analog output

AD-1682

- ✓ Enables use of a balance/scale in the field without AC power
- ✓ Also gives you peace of mind when stable power supply is not guaranteed

Applicable product	Duration of continuous operation (typical)
GX-K/GF-K, GP	6 hours
BM	7 hours
GH, GX/GF, GR, MC, HR-i, AD-1690	8 hours

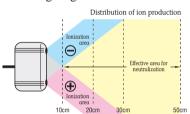


Battery type	Nickel-Metal-Hydride (Ni-MH)		
Charging time	Approx. 15 hours		
Dimensions	96 (W) × 140 (D) × 58 (H) mm		

Static Eliminator

AD-1683

- ✓ Instantly neutralizes charged objects to ensure stable weighing
- Adopts the direct-current (DC) method, which causes no breeze and is therefore ideal for fine powders
- ✓ Long life of approx. 10,000 hours
- ✓ Compact size of 112 (W) \times 92 (D) \times 60 (D) mm for use on either a desktop or production line





Electrostatic Field Meter

AD-1684

- ✓ Detects the presence of static electricity, which is often the cause of unstable weighing
- ✓ Compact $(123 \times 73 \times 25 \text{ mm})$ and lightweight (approx. 170 g)



Density Determination Kit for Analytical Balances

AD-1653

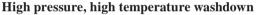
- ✓ Makes it easy to calculate the density of either a solid or liquid substance
- ✓ Fits the BM-252/200/300/500, GH series and GR series*

* Please use the AD-1654 for the HR-AZ/HR-A series.











Withstands extremely damp environments



Stainless steel frame and load cell





























- ✓ Ultimate protection against the effects of condensation as well as water*
- ✓ Streamlined construction for easy cleaning of food-processing residues
- ✓ Stainless steel weighing pan, frame and load cell **
- ✓ Rugged and adjustable (0°, 30°, 60° or 90°) indicator bracket
- ✓ Touch sensitive capacitive keys to prevent damage from sharp objects
- ✓ Auto-tare function to facilitate consecutive check weighing
- ✓ Three sizes of base units, which are also available separately
- ✓ Pole stand attachable to either the short or long side of the platform
 - * Both IP69K and IP68 compliant
 - ** Weighing pan and frame = SUS304 Load cell = SUS630



The display unit as an IP69K indicator (SW-D)

You can purchase the SW display unit (SW-D) separately and use it as an IP69K (as well as IP68) indicator with platforms (load cells) other than A&D's.

Model	SW-6KS	SW-15KS	SW-15KM	SW-30KM	SW-60KM	SW-150KM	SW-60KL	SW-150KL
Capacity	6 kg	15 kg	15 kg	30 kg	60 kg	150 kg	60 kg	150 kg
Resolution	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
(switchable)	0.001 kg	0.002 kg	0.002 kg	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
	0.0005 kg	0.001 kg	0.001 kg	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Weighing pan	250 × 2	50 mm	300 × 380 mm			390 × 5	30 mm	

❖ g, oz, lb and lb-oz also available (g not available for SW-60K/150K)

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6 V, 4 Ah) SW-03 RS-232C + comparator relay output

SW-04 RS-422/485 interface SW-09 Short pole stand (for SW-6KS/15KS only)

SW-10 Long pole stand

SW-11 Desktop/wall-mount stand

SC/SE Series





























Easy cleaning



Washdown construction

- ✓ Submersible and fit for extremely wet work environments
- ✓ 5,000 hours of continuous operation with 6 D alkaline batteries
- ✓ High-speed weighing with 1-second stabilization
- ✓ Supersized LCD display with 39 mm character height
- ✓ Stainless steel weighing pan (SC: SUS304 / SE: SUS430)
- ✓ Waterproof and corrosion-resistant load cell*
- ✓ Battery life indicator
 - * Aluminum anodized and coated with epoxy resin with protective silicon over wiring



SC: stainless steel (SUS304) frame and column



SE: steel frame and column



Easily removable battery unit

	SC-30KAM	SC-60KAM	SC-150KAM	SC-60KAL	SC-150KAL
Model	SE-30KAM	SE-60KAM	SE-150KAM	SE-60KAL	SE-150KAL
Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Resolution	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
(switchable)	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Weighing pan	300 × 380 mm			390 × 5	30 mm

❖ oz and lb also available

Options & Accessories

SCE-02 Quick USB interface

- SCE-03 RS-232C + comparator relay output
- ★ SCE-02 and SCE-03 cannot be used at the same time. ★★ SC/SE series is not IP68 compliant with SCE-02 or SCE-03

FS-i Series































- ✓ Ultra high-speed weighing with 0.5-second stabilization
- ✓ Distinct tricolor LEDs for fast and error-free comparator judgment
- ✓ Take-away checkweighing using the auto-tare function
- ✓ Washable and hygienic stainless steel (SUS304) display unit and weighing pan
- ✓ Waterproof and corrosion-resistant load cell*
- ✓ Fast data acquisition with a refresh rate of 20 times/second
- ✓ Large memory of 100 comparator settings
- ✓ 60-segment analog sweep (horizontal bar) display for intuitive filling control
- ✓ Simple operation mode to prevent accidental changes to the settings

* Aluminum anodized and coated with epoxy resin with protective silicon over wiring



The display unit as an IP65 indicator for checkweighing scales (FS-D)

The FS-i display unit, or FS-D, has eight preset capacities with three selectable resolutions, and can be used with platforms other than A&D's.

Model	FS-6Ki	FS-15Ki	FS-30Ki
Capacity	6 kg	15 kg	30 kg
Resolution (switchable)	0.002 kg 0.001 kg 0.0005 kg	0.005 kg 0.002 kg 0.001 kg	0.01 kg 0.005 kg 0.002 kg
Weighing pan	250 × 2	380 × 300 mm	

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6V, 4Ah)
FS-03i RS-232C + comparator relay output
FS-04i RS-422/485 + comparator relay output

★ FS-03i and FS-04i cannot be used at the same time.

[❖] g, oz, lb and lb-oz also available

HV-C(P)/HW-C(P) Series



- ✓ Stabilization within 1 second (for the HV-C/HV-CP series)
- ✓ Bright and multi-colored 5-step LED comparator lights
- ✓ Take-away checkweighing using the auto-tare function
- ✓ Quick and easy setting using the alphanumeric keypad
- ✓ Built-in printer for creating paper-based records on the spot (for the HV-CP/ **HW-CP** series)
- ✓ IP65 dust & waterproof base unit with a stainless steel (SUS430) pan
- ✓ Three slots for optional data communication interfaces

Model	HV-15KC HV-15KCP			HV-60KC HV-60KCP			HV-200KC HV-200KCP		
Capacity	3 kg	6 kg	15 kg	15 kg 15 kg 30 kg 60 kg		60 kg	150 kg	220 kg	
Resolution	0.001 kg			0.005 kg	0.01 kg	0.02 kg	0.02 kg	0.05 kg	0.1 kg
Power supply	HV-C series : AC adapter or 4 HV-CP series: AC adapter				•	oatteries (12	00 hours)		
Weighing pan	250 × 250 mm			330 × 424 mm			390 × 530 mm		

Model	HW-10KC HW-10KCP	HW-60KC HW-100KC HW-100KCP HW-100KCP		HW-200KC HW-200KCP				
Capacity	10 kg	60 kg	100 kg	220 kg				
Resolution	0.001 kg	0.005 kg	0.01 kg	0.02 kg				
Power supply	HW-C series : AC adapter or 4 D batteries (1200 hours) HW-CP series: AC adapter							
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm					

Optional

HV/HW-C

Platform only





Options & Accessories

 ${\bf HVW\text{-}02CB} \ \ {\bf USB} \ interface \ (for \ bi\text{-}directional \ communication, \ type\text{-}B)$

HVW-03C RS-232C interface (D-Sub 9P)

HVW-04C Comparator relay output/buzzer/contact input interface HVW-08C Extension cable (5 m)*

* Recalibration is required after connecting the extension cable

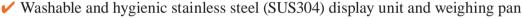
HVW-11C Wall-mount bracket HVW-13

Large roller conveyer (for the 100 to 200 kg capacity models) HVW-14 Medium-size roller conveyer (for the 60 kg capacity models)

AX-PP147-S Paper for the built-in printer (5 rolls)

HV-WP/HW-WP Series





✓ Wide selection from 7 models in total

HV-□□□V-WP Triple weighing ranges & VFD display HW-□□□V-WP High resolution (1/10,000) & VFD display

✓ Simple batch function and full/dribble batch function

✓ Detachable/wall-mountable display unit (optional holder is required)

Model	HV-15KV-WP		HV-60KV-WP			HV-200KV-WP			
Capacity	3 kg	6 kg	15 kg	15 kg 30 kg 60 kg		60 kg	150 kg	220 kg	
Resolution	0.001 kg	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.02 kg	0.05 kg	0.1 kg
Power supply		AC main							
Weighing pan	2	50 × 250 mr	n	330 × 424 mm			390 × 530 mm		

Model	HW-10KV-WP	HW-60KV-WP	HW-100KV-WP	HW-200KV-WP				
Capacity	10 kg	60 kg	100 kg	220 kg				
Resolution	0.001 kg	0.005 kg	0.005 kg 0.01 kg 0.02					
Power supply	AC main							
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm					

Options & Accessories

HVW-02G Extension cable (5 m)
HVW-03G RS-232C + comparator relay output with buzzer

HVW-04WP RS-422/485 + comparator relay output

RS-422/485 + comparator relay output

★ Only one of HVW-03G, HVW-04WP or the standard RS-232C can be used.

HVW-13 Roller conveyer (large) for HV-200KV-WP,

HW-100K/200KV-WP

HVW-14 Roller conveyer (medium) for HV/HW-60KV-WP

AX-043005266 Indicator holder/wall-mount kit



































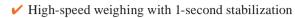












- ✓ Display unit either on a column (FG-KAM/KAL) or attached directly to the platform (FG-KBM)
- ✓ Washable stainless steel (SUS430) weighing pan
- ✓ Two types of power supply: AC adapter or normal batteries



FG-60KBM

Model	FG-30KAM FG-30KBM	FG-60KAM FG-60KBM	FG-150KAM FG-150KBM	FG-60KAL	FG-150KAL
Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Resolution	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
(switchable)	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Weighing pan		300 × 380 mm	390 × 5	30 mm	

Options & Accessories

FG-23 RS-232C interface

FG-150KAL

FG-24 RS-232C + comparator relay output

* FG-23 and FG-24 cannot be used at the same time.

HVW-02G Extension cable (5 m) AX-3007527-5S Protective cover (5 pcs)

Counting Scales





















Optional







- ✓ Beginner-friendly Unit Weight Registering Navigator
- ✓ Audible Weighing Assist (AWA) beep function
- ✓ Detachable display unit
- ✓ Washable stainless steel (SUS430) weighing pan
- ✓ Memory capacity for up to 99 items
- ✓ Simple operation mode to avoid any unwanted operational mistakes

Model		HC-3Ki	HC-6Ki	HC-15Ki	HC-30Ki			
Min.	Normal mode	0.1 g	0.2 g	0.4 g	1 g			
unit weight	Fine mode	0.005 g	0.01 g	0.02 g	0.05 g			
Capacity		3 kg	6 kg	15 kg	30 kg			
Resolution		0.5 g	1 g	2 g	5 g			
Max. count display		600,	,000	750,000	600,000			
Weighing p	an		300 × 210 mm					

Options & Accessories

HC-02i Sealed Lead Acid rechargeable battery (6V, 4Ah)

HC-03i RS-232C interface

HC-04i RS-232C + comparator relay

HC-08i Extension cable (2 m)

 \bigstar HC-03i and HC-04i cannot be used at the same time.

FC-Si/FC-i Series

















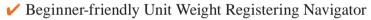












- ✓ High internal resolution (FC-Si: 1/10,000,000 / FC-i: 1/1,000,000) for extremely accurate counting
- ✓ Large memory capacity for up to 500 items
- ✓ Removable stainless steel (SUS304) weighing pan
- ✓ Simple operation mode to avoid any unwanted operational mistakes



Two scale operation

You can connect a separately-sold weighing platform to count articles that require a larger capacity than that of the FC-Si/FC-i.

Model		FC-500Si	FC-5000Si	FC-500i	FC-1000i	FC-2000i	FC-5000i	FC-10Ki	FC-20Ki	FC-50Ki
Min.	Normal mode	0.001 g	0.01 g	0.01 g	0.02 g	0.04 g	0.1 g	0.2 g	0.4 g	1 g
unit weight	Fine mode	0.00005 g	0.0005 g	0.0005 g	0.001 g	0.002 g	0.005 g	0.01 g	0.02 g	0.05 g
Capacity		500 g	5000 g	500 g	1 kg	2 kg	5 kg	10 kg	20 kg	50 kg
Resolution		0.02 g	0.2 g	0.05 g	0.1 g	0.2 g	0.5 g	1 g	2 g	5 g
Max. count	display	9,999	9,999	1,000,000						
Weighing pe	an	128 × 128 mm	165 × 165 mm	mm 205 × 152 mm 300 × 280 mm						

Options & Accessories

FC-01i Barcode reader

FC-02i Built-in rechargeable battery pack (Ni-MH)

FC-03i RS-232C × 2 ch

FC-04i RS-232C x 1 ch + comparator relay output

FC-05i Interface for a remote scale

★ FC-03i and FC-04i cannot be used at the same time

HI Series



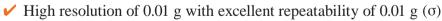
Stackable carrying case

Takes up less space for storage

- ✓ Three color bars to sort scales easily
- ✓ Long battery life of approx. 450 hours (with alkaline batteries)
- ✓ Security slot in the rear of the scale to accommodate an anti-theft lock
- ✓ Multiple weighing units: g, oz, lb-oz*, ozt, tl, tol, N
- ✓ Optional stainless steel (SUS304) weighing pan

* lb-oz not available with the HT-300

Compact Precision Scale 1717-120



- ✓ Unparalleled battery life of 500 hours (with alkaline batteries, backlight off)
- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan and protector plate
- ✓ Stackable carrying case that economizes space for storage
- Security slot in the rear of the scale to accommodate an anti-theft lock
- ✓ Multiple weighing units: g, oz, ozt, ct, mom, dwt, gr, tl, tol, N

Model	HT-120	HT-300	HT-500	HT-3000	HT-5000		
Capacity	120 g	310 g	510 g	3100 g	5100 g		
Resolution	0.01 g	0.1 g 1 g					
Weighing pan	ø70 mm	132 × 130 mm					

Options & Accessories

Stainless steel (SUS304) pan for HT-300/500/3000/5000 (HT-10) AC adapter



SK-WP Series





















- ✓ Washable and hygienic stainless steel (SUS304) construction
- ✓ Long battery life of approx. 1200 hours (with alkaline batteries)
- ✓ Large and wide-angle LCD display with 25 mm character height

Model	SK-1000WP	SK-2000WP	SK-5000WP	SK-5001WP	SK-10KWP	SK-20KWP	SK-30KWP	
Capacity	1000 g	2000 g	5000 g	5000 g	10 kg	20 kg	30 kg	
Resolution	0.5 g	1 g	2 g	1 g	5 g	10 g	20 g	
Weighing pan		232 × 192 mm						

Options & Accessories AC adapter* * SK-WP series is not IP65 compliant with the AC adapter.

IP65 Dust & Waterproof Compact Scales

HL-WP Series





















- ✓ Washable and hygienic stainless steel (SUS304) construction
- ✓ Battery life of approx. 200 hours (with alkaline batteries)
- ✓ Version with a larger pan size available (HL-3000LWP)

Model	HL-300WP	HL-1000WP	HL-3000WP	HL-3000LWP
Capacity	300 g	1000 g	3000 g	3000 g
Resolution	0.1 g	0.5 g	1 g	1 g
Weighing pan		128 × 128 mm		174 × 137 mm

SJ-HS Series



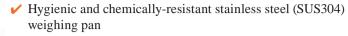












- ✓ High-speed weighing with 1-second stabilization
- ✓ Long battery life of approx. 2000 hours (with alkaline batteries)
- ✓ Multiple weighing units: g, oz, lb, lb-oz
- ✓ Two side handles for easy carrying of the scale

Model	SJ-1000HS	SJ-2000HS	SJ-5000HS	SJ-5001HS	SJ-12KHS	SJ-20KHS	SJ-30KHS	
Capacity	1000 g	2000 g	5000 g	5000 g	12 kg	20 kg	30 kg	
Resolution	0.5 g	0.5 g 1 g 2 g 1 g 5 g 10 g 2						
Weighing pan		230 × 190 mm						

Options & Accessories AC adapter

Compact Scales

HIL-i Series



- ✓ Compact, and storable on side or back to save space
- ✓ Long battery life of approx. 1000 hours (with alkaline batteries)
- ✓ Multiple weighing units: g, oz, tl and ct (HL-200i) or lb-oz (HL-2000i)
- ✓ Optional stainless steel weighing (SUS304) pan and carrying case

Model	HL-200i	HL-2000i
Capacity	200 g	2000 g
Resolution	0.1 g	1 g
Weighing pan	ø130 mm	

Options & Accessories

Stainless steel (SUS304) pan (AX-043008052) Carrying case (AX-093008304) AC adapter

Pocket Scale

HJ-150





- ✓ Compact (66 × 98 mm) and lightweight (100 g including batteries)
- ✓ Protective cover that also becomes a weigh boat
- ✓ Comes with a free calibration weight

Model	HJ-150	
Capacity	150 g	
Resolution	0.1 g	
Weighing pan	60 × 64 mm	

FZ-CT/FX-CT Series

✓ High-speed weighing with 2-second stabilization

✓ Removable, shatterproof breeze break with antistatic coating

✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)





- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: ct, g, oz, lb, lb-oz, ozt, mom, dwt, gr, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)

	FZ-500CT	FZ-700CT	FZ-1200CT
Model	FX-500CT	FX-700CT	FX-1200CT
Capacity	510 ct / 102 g	760 ct / 152 g	1260 ct / 252 g
Resolution	0.001 ct / 0.001 g		
$\textbf{Repeatability}(\sigma)$	0.001 ct / 0.0005 g		
Linearity	±0.002 ct / ±0.001 g		
Weighing pan	ø90 mm		

Options & Accessories

AX-CARATPAN-W Carat pan (silver, 2pcs) AX-CARATPAN-B Carat pan (black, 2pcs)

* Please refer to the HR-AZ/HR-A series for other options and accessories available.









































Jewelry Scale

HT-500GD



- ✓ Multiple weighing units: g, oz, lb-oz, ozt, dwt, ct, tl, tol, N
- ✓ Scratch-resistant stainless steel (SUS304) weighing pan
- ✓ Long battery life of approx. 450 hours (with alkaline batteries)
- ✓ Security slot in the rear of the scale to accommodate an anti-theft lock
- Stackable carrying case that economizes space for storage

Model	HT-500GD	
Capacity	510 g	
Resolution	0.1 g	
Weighing pan	135 × 133 mm	

Options & Accessories

AC adapter











Discover Precision

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